

FIG. 1 (PRIOR ART)



FIG. 2

PROTOCOL ENTITY 306

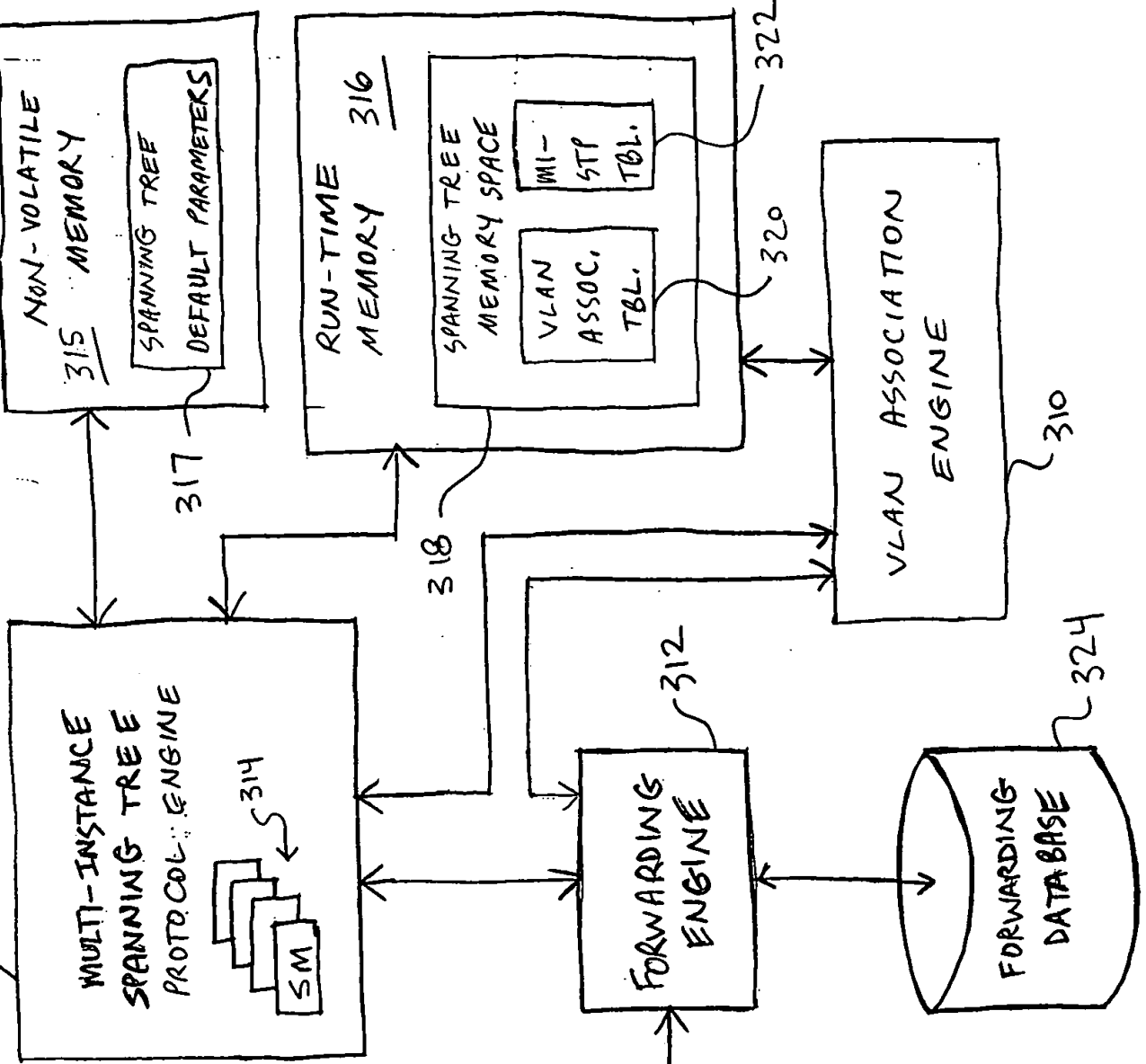
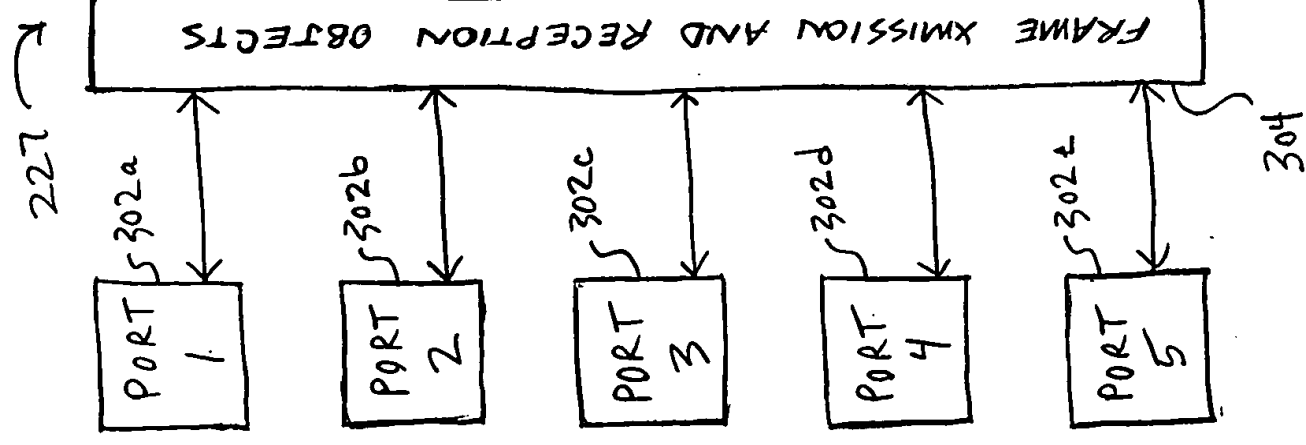


FIG. 3

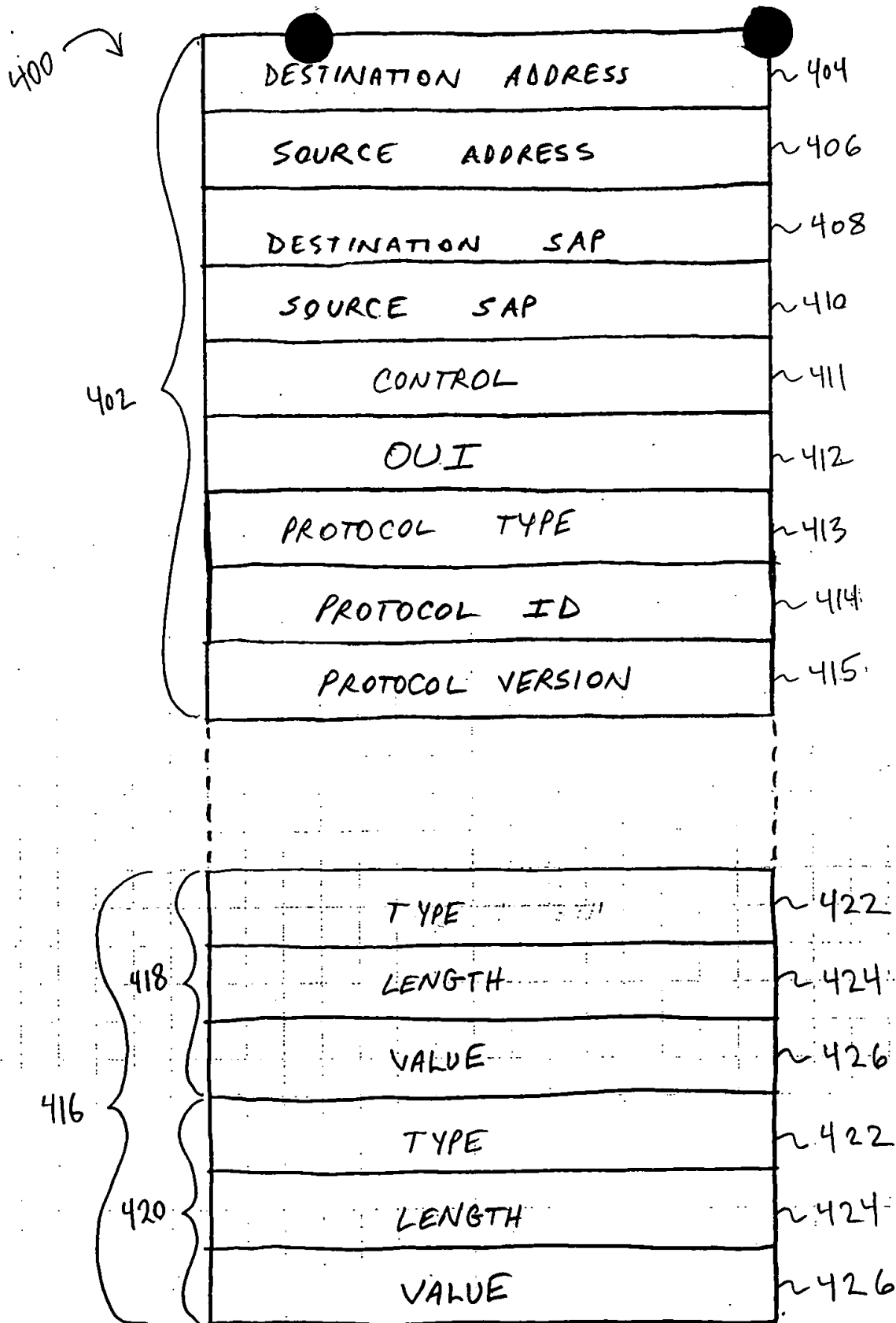


FIG. 4A

428

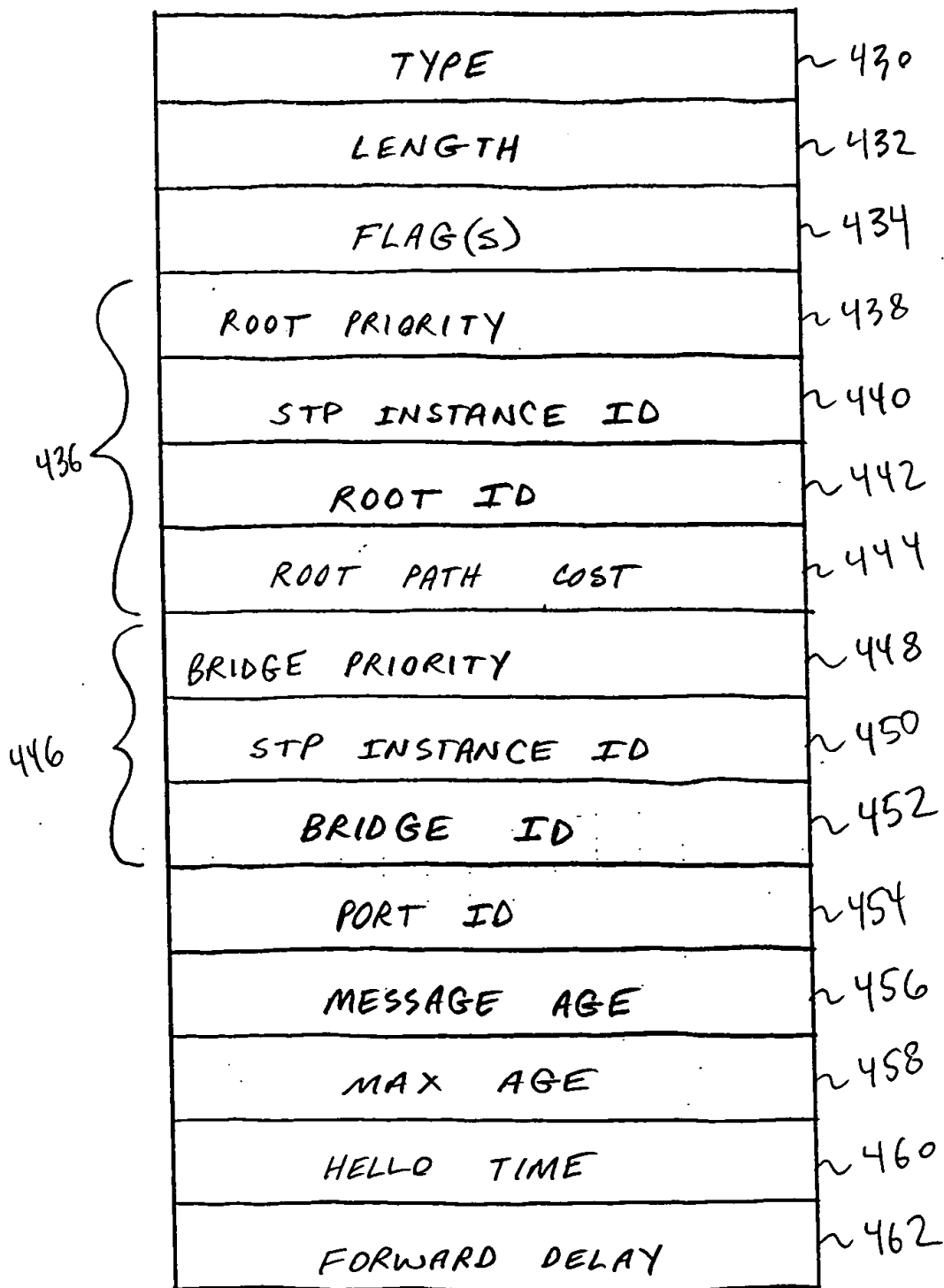


FIG. 4B

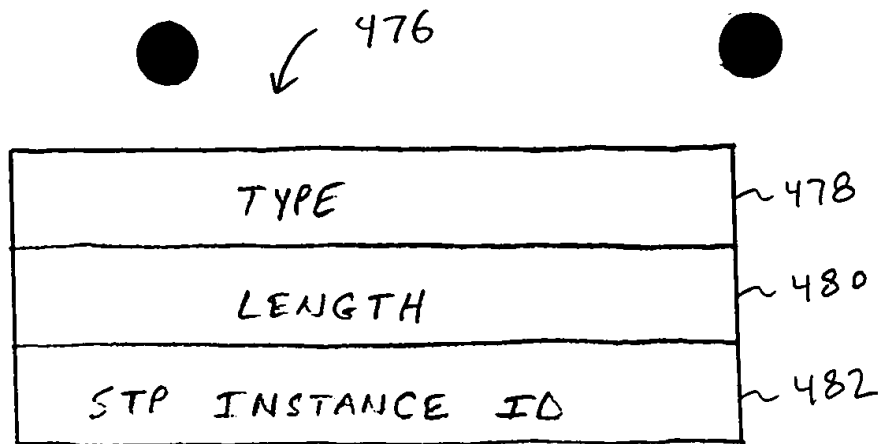


FIG. 4D

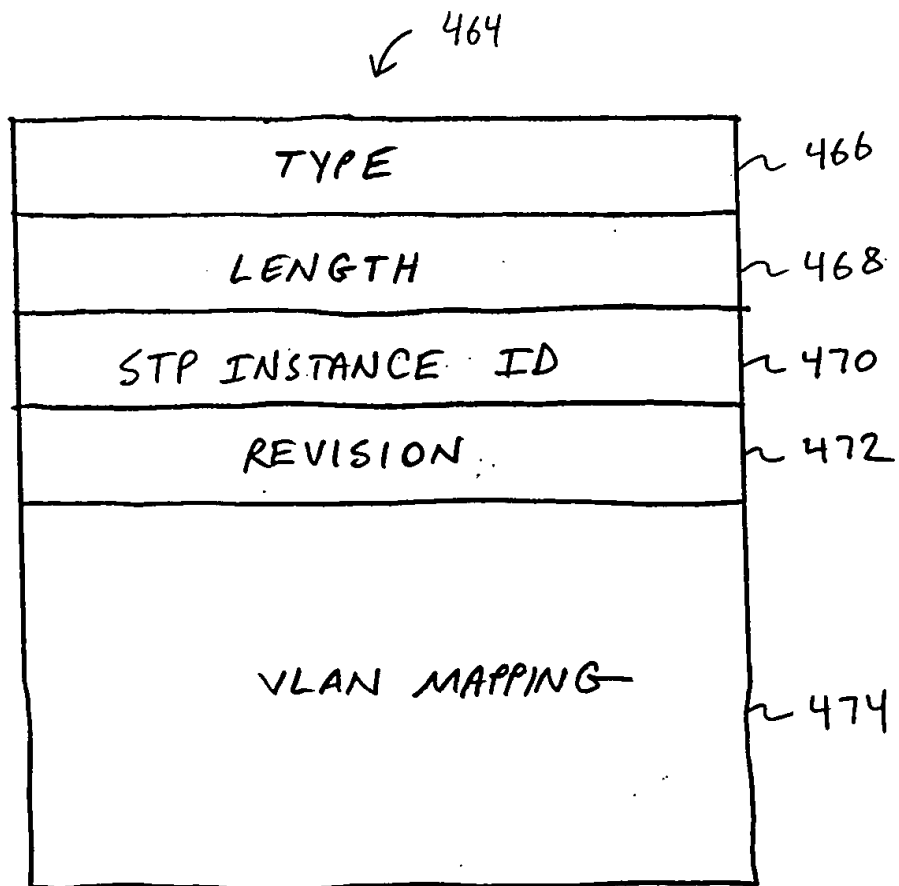


FIG. 4C

322

504
↓

506
↓

508
↓

| STP INSTANCE ID | SPANNING TREE INFORMATION | VLAN MAPPING | | |
|-----------------------|------------------------------|------------------------|--------------------|------|
| | | 508a ↓ REVISIONS | 508b ↓ VLANS | |
| 1 | root, root port, ... | 2 | NULL | ~S02 |
| 2 | root, root port, ... | 6 | B | ~S02 |
| 3 | root, root port, ... | 3 | G, Y | ~S02 |
| 4 | root, root port, ... | 1 | 0 | ~S02 |
| 5 | root, root port, ... | 15 | V | ~S02 |
| 6 | root, root port, ... | 7 | R | ~S02 |
| • | • | • | • | |
| • | • | • | • | |
| • | • | • | • | |
| 15 | root, root port, ... | 9 | P | ~S02 |
| 16 | root, root port, ... | 21 | M | ~S02 |

FIG. 5

09690619.101700

320

604

606

| VLAN DESIGNATION | SPANNING TREE INSTANCE | |
|---------------------|---------------------------|-------|
| 0 | NULL | ~ 602 |
| 1 | 6 | ~ 602 |
| 2 | 12 | ~ 602 |
| 3 | 12 | ~ 602 |
| 4 | 3 | ~ 602 |
| 5 | 12 | ~ 602 |
| 6 | 3 | ~ 602 |
| . | . | |
| . | . | |
| . | . | |
| 4092 | 8 | ~ 602 |
| 4093 | 8 | ~ 602 |
| 4094 | 12 | ~ 602 |
| 4095 | 4 | ~ 602 |

FIG. 6

09690619-101700

DDIOT 619700360

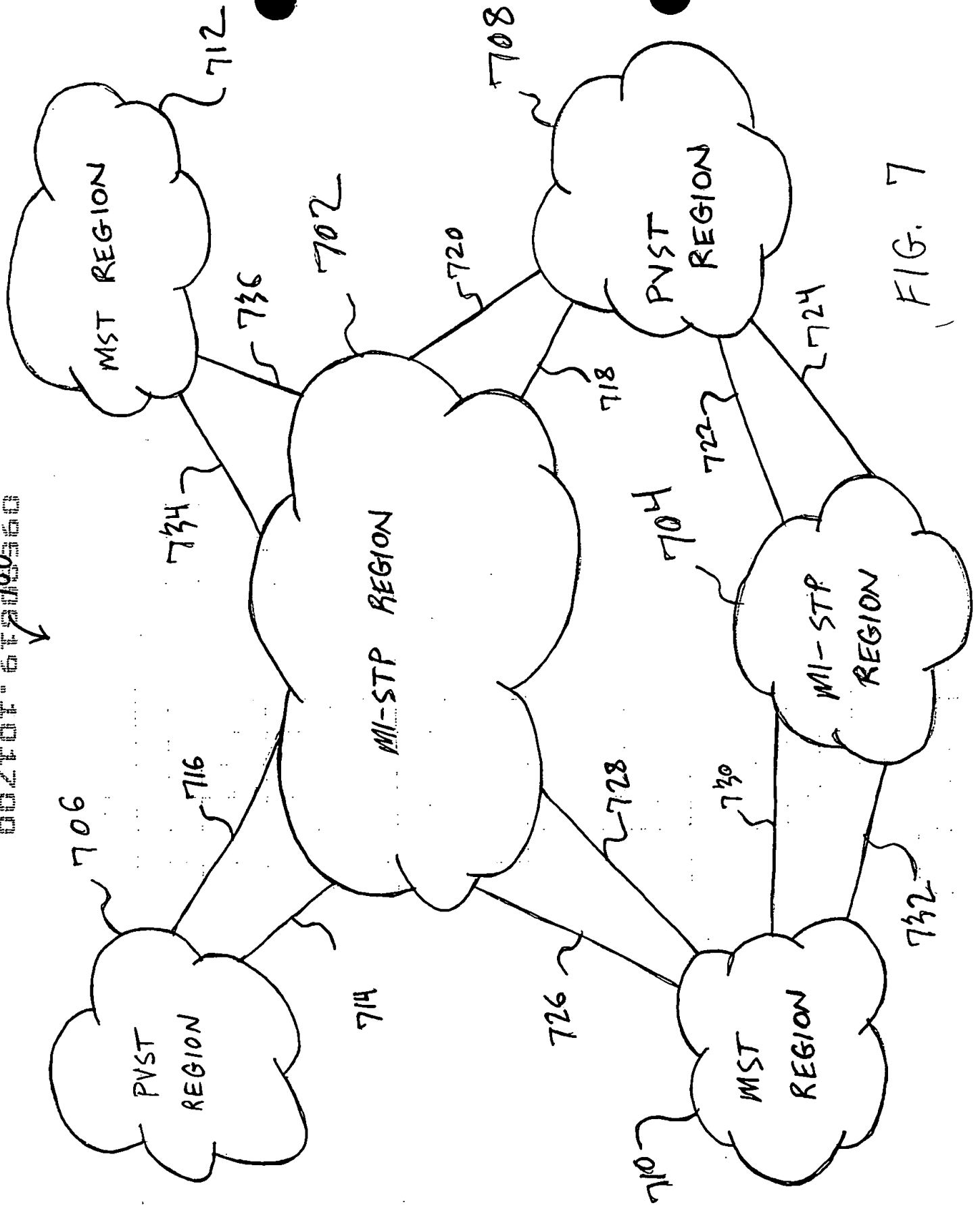


FIG. 7

FOR EACH SPANNING TREE INSTANCE FOR WHICH A SWITCH BELIEVES IT IS THE ROOT, GENERATE AND SEND ONE OR MORE MI-STP BPDUs HAVING CONFIGURATION TLVs IDENTIFYING ITSELF AS THE ROOT

~802

COMPARE CONTENTS OF CONFIGURATION TLVs OF ANY RECEIVED MI-STP BPDUs WITH BEST KNOWN SPANNING TREE DATA FOR THAT INSTANCE

~804

FOR EACH SPANNING TREE INSTANCE, IDENTIFY ROOT, ROOT PORT AND DESIGNATED PORT(S), IF ANY

~806

MAP VLAN DESIGNATIONS TO SPANNING TREE INSTANCES BY APPENDING VLAN TLVs TO THE MI-STP BPDUs

~808

FIG. 8